

WHAT IS CLAIMED IS:

1. A circulation member for circulating a number of balls and a number of spacers, each spacer being disposed between the balls, which are arranged in a ball rolling groove formed between a track member and a movable member, in accordance with a relative motion of the movable member with respect to the track member,

wherein the circulation member is provided with a scoop-up groove for scooping the balls by contacting the ball rolling in the ball rolling passage at both side edge portions of the scoop-up groove and is provided with a spacer scoop-up portion which contacts and scoops the spacer moving in the ball rolling passage without contacting the balls.

2. The circulation member according to claim 1, wherein said spacer scoop-up portion is formed with an escape surface which is apart from a track of the ball scooped by the scoop-up groove and contacts the spacer.

3. A ball screw comprising:

a screw shaft formed, on an outer periphery thereof, with a spiral ball rolling groove;

a nut assembled with the screw shaft and formed, on an inner periphery thereof, with a spiral loaded

ball rolling groove so as to oppose to the ball rolling groove formed on the screw shaft to thereby form a ball rolling passage;

a number of balls disposed in the ball rolling passage;

a number of spacers disposed between the balls in the ball rolling passage; and

a circulation member for circulating a number of balls and spacers, each spacer being disposed between the balls in accordance with a relative motion of the nut with respect to the screw shaft, wherein the circulation member is provided with a scoop-up groove for scooping the balls by contacting the ball rolling in the ball rolling passage at both side edge portions of the scoop-up groove and is provided with a spacer scoop-up portion which contacts and scoops the spacer moving in the ball rolling passage without contacting the balls.

4. The ball screw according to claim 3, wherein said spacer scoop-up portion is formed with an escape surface which is apart from a track of the ball scooped by the scoop-up groove and contacts the spacer.

5. The ball screw according to claim 4, wherein said circulation member has a linear passage having a circular section for linearly moving the ball scooped

up by the scoop-up groove, and said spacer scoop-up portion is formed at a bottom portion of the scoop-up groove and is formed with an escape surface which is inclined by a predetermined angle with respect to an inner peripheral surface of the linear passage in a sectional area including a center line of the linear passage.

6. A motion guide device comprising:

a track rail formed with a ball rolling groove;

a slide member mounted to the track member to be relatively movable with respect thereto and is formed with a loaded ball rolling groove so as to oppose to the ball rolling groove of the track member to thereby form a ball rolling passage;

a number of balls disposed in the ball rolling passage;

a number of spacers disposed between the balls in the ball rolling passage; and

a circulation member for circulating a number of balls and spacers, each spacer being disposed between the balls in accordance with a relative motion of the slide member with respect to the track member, wherein the circulation member is provided with a scoop-up groove for scooping the balls by contacting the ball rolling in the ball rolling passage at both side edge portions of the scoop-up groove and is

provided with a spacer scoop-up portion which contacts and scoops the spacer moving in the ball rolling passage without contacting the balls.

7. The motion guide device according to claim 6, wherein said spacer scoop-up portion is formed with an escape surface which is apart from a track of the ball scooped by the scoop-up groove and contacts the spacer.